

AMENDMENTS TO THE CLAIMS

1. (currently amended) A space division multiple access (SDMA) cellular radio telecommunications network, in which in use physical channels ~~may be~~ are reused in the same cell, reused channels on the up link being differentiated by a time shift between them.
2. (original) A network as claimed in claim 1, wherein the reused channels use a common clock signal.
3. (original) A network as claimed in claim 1 or 2, in which timing advance information for each base station reusing a channel is transmitted on the down link.
4. (original) A network as claimed in claim 1 or 2, wherein the reused channels all use the same signature.
5. (original) A network as claimed in claim 1 or 2, including a master base station and a co-located slave base station, wherein the master base station generates a common reference clock and the slave base station uses a shifted reference clock to send time shift information to the mobiles.
6. (original) A network as claimed in claim 1 or 2, a base station having two receivers operating with mutually shifted time references.
7. (original) A network as claimed in claim 1 or 2, wherein the time shift is longer than the propagation delay in the reused channels.
8. (original) A network as claimed in claim 1 or 2, wherein the time shift is approximately equal to the guard interval.
9. (currently amended) A method of operation ~~a~~ of an space division multiple access (SDMA) cellular radio telecommunications network, in which in use physical channels ~~may be~~ are reused in the same cell, reused channels on the up link being differentiated by a time shift between them.

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10. (original) A method as claimed in claim 9, wherein the reused channels use a common clock signal.

11. (currently amended) A ~~network~~ method as claimed in claim 9 or 10, in which timing advance information for each base station reusing a channel is transmitted on the down link.

12. (original) A ~~network~~ method as claimed in claim 9 or 10, wherein the reused channels all use the same signature.

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13. (original) A method as claimed in claim 12, wherein a master base station generates a common reference clock and a co-located slave base station uses a shifted reference clock to send time shift information to the mobiles.

14. (original) A method as claimed in claim 13 wherein two receivers at a base station operate with mutually shifted time references.

15. (original) A method as claimed in claim 9 or 10, wherein the time shift is longer than the propagation delay in the reused channels.

16. (original) A method as claimed in claim 9 or 10, wherein the time shift is approximately equal to the guard interval.

17. (original) A protocol for carrying out all the steps of the method of any of claims 9 or 10.

18. (original) A computer program for carrying out all the steps of the method of any of claims 9 or 10.
